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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/043,671

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Hiromu Kitamura

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04/22/2004

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EXAMINER

WEST, LEWIS G

ART UNIT

PAPER NUMBER

2682

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/043,671

Applicant(s)

KITAMURA ET AL.

Examiner

Lewis G. West

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Objections

Claims 9 and 10 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitations of claim 9 and 10 describing the lighting device and diffuser are duplicates of limitations found in claim and therefore do not further limit the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-5 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenmochi.

Regarding claim 1, Kenmochi discloses a portable telephone comprising: a plurality of input buttons for inputting various indications; at least one light emitting element which emits a light; (4)

at least one diffuser which is located under said a plurality of input buttons and which diffuses said light emitted from said light emitting element; (2) said diffuser including:

an incidence portion which has a receiving plane positioned near said light emitting element and receiving said light emitted from said light emitting element;

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and a projecting portion which has a reflecting plane for reflecting said light received by said incidence portion to an upper side of said a plurality of input buttons. (Col. 4 lines 17-41)

Kenmochi does not expressly disclose lighting the buttons when any one of said a plurality of input buttons is pushed on. Examiner takes official notice that lighting buttons on a portable phone when a button is pressed is notoriously well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to light the keyboard when a key is pressed in order to overcome at least the problem of seeing the keys in a poorly lit area, and saving power by waiting to light until the key is pressed, both of which are known problems in the prior art which have been previously addressed by this solution.

Regarding claim 4, a portable telephone as claimed in claim 2, wherein concave and convex are formed on a surface of said receiving plane of said incidence portion. (Col. 4 lines 17-41)

Regarding claim 5, Kenmochi discloses a portable telephone as claimed in claim 1, wherein said light emitting element is a light emitting diode. (Col. 4 lines 17-41)

Regarding claim 8, a portable telephone as claimed in claim 4, wherein said light emitting element is a light emitting diode. (Col. 4 lines 17-41)

Regarding claim 9, Kenmochi discloses a diffuser located under the input buttons of said portable telephone as claimed in claim 1, wherein said diffuser comprises:

an incidence portion which has a receiving plane for receiving a light emitted from said light emitting element; and a projecting portion which has a reflecting plane for reflecting said light received by said incidence portion to an upper side of said a plurality of input buttons. (Col. 4 lines 17-41)

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Regarding claim 10, Kenmochi discloses a lighting device located near the input buttons of said portable telephone as claimed in claim 1, wherein said lighting device further comprises: at least one light emitting element which emits a light when any one of said a plurality of input buttons is pushed on; at least one diffuser which diffuses said light emitted from said light emitting element; said diffuser further comprising: an incidence portion which has a receiving plane for receiving a light emitted from said light emitting element; and a projecting portion which has a reflecting plane for reflecting said light received by said incidence portion to an upper side of said a plurality of input buttons. (Col. 4 lines 17-41)

Claims 1, 3, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker (5,975,711).

Regarding claim 1, Parker discloses a portable telephone comprising: a plurality of input buttons for inputting various indications; at least one light emitting element which emits a light; (6)

at least one diffuser which is located under said a plurality of input buttons and which diffuses said light emitted from said light emitting element; said diffuser including:

an incidence portion which has a receiving plane positioned near said light emitting element and receiving said light emitted from said light emitting element;

and a projecting portion which has a reflecting plane for reflecting said light received by said incidence portion to an upper side of said a plurality of input buttons. (Col. 6 lines 14-54)

Parker does not expressly disclose lighting the buttons when any one of said a plurality of input buttons is pushed on. Examiner takes official notice that lighting buttons on a portable

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phone when a button is pressed is notoriously well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to light the keyboard when a key is pressed in order to overcome at least the problem of seeing the keys in a poorly lit area, and saving power by waiting to light until the key is pressed, both of which are known problems in the prior art which have been previously addressed by this solution.

Regarding claim 3, a portable telephone as claimed in claim 1, wherein concave and convex are formed on a surface of said receiving plane of said incidence portion. (Col. 6 lines 14-54)

Regarding claim 7, a portable telephone as claimed in claim 3, wherein said light emitting element is a light emitting diode. (Col. 5 lines 1-9)

Claims 1, 2, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khufus (4,349,705).

Regarding claim 1, Khufus discloses a portable telephone comprising: a plurality of input buttons for inputting various indications; at least one light emitting element which emits a light;

at least one diffuser which is located under said a plurality of input buttons and which diffuses said light emitted from said light emitting element; said diffuser including:

an incidence portion which has a receiving plane positioned near said light emitting element and receiving said light emitted from said light emitting element;

and a projecting portion which has a reflecting plane for reflecting said light received by said incidence portion to an upper side of said a plurality of input buttons. (Col. 3 lines 26-39)

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Parker does not expressly disclose lighting the buttons when any one of said a plurality of input buttons is pushed on. Examiner takes official notice that lighting buttons on a portable phone when a button is pressed is notoriously well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to light the keyboard when a key is pressed in order to overcome at least the problem of seeing the keys in a poorly lit area, and saving power by waiting to light until the key is pressed, both of which are known problems in the prior art which have been previously addressed by this solution.

Regarding claim 2, a portable telephone as claimed in claim 1, wherein said receiving plane of said incidence portion is a part of an arc any portions of which has an equal distance from said light emitting element. (Col. 3 lines 26-39)

Regarding claim 6, a portable telephone as claimed in claim 2, wherein said light emitting element is a light emitting diode. (Col. 3 lines 26-39)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Messel (US 6,550,927) discloses a backlit keypad with concave reflective surfaces.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis G. West whose telephone number is 703-308-9298. The examiner can normally be reached on Monday-Thursday 6:30-5:00.

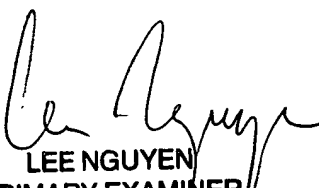
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lewis West
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April 15, 2004



LEE NGUYEN
PRIMARY EXAMINER